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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,814	12/18/2001	David L. Graumann	884.603USI	6114
8791	7590	04/19/2006		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER GRIER, LAURA A	
			ART UNIT 2615	PAPER NUMBER

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,814

Applicant(s)

GRAUMANN, DAVID L.

Examiner

Laura A. Grier

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-25 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The indicated allowability of claims 2-7, and 9 is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rung, U. S. Patent 6526147.

Regarding claim 1, Rung discloses a microphone array with high directivity. Rung discloses a housing (10), wherein the microphone has visual indication function, which is visible through an opening (12) via a light source (11), and obviously indicates that the opening is only visible to a speaker when the speaker's mouth is within a sensitivity region of a microphone in respect the position or angle of the microphone (col. 6, lines 5-27 and col. 8, lines 19-32), which reads on an enclosure, a light-emitting device, therein as claimed. However, Rung fails to disclose the walls of the enclosure being coated to absorb light. The examiner takes official notice that light absorbing materials and/or films used in microphones were well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Rung by implementing a light absorbing material or film for the purpose limiting the visibility of the lights reflection.

Regarding claim 2, Rung discloses everything claimed as applied above (see claim 1). However, Rung fails to disclose the sides of the cavity are sloped. With the angle projection (see figure 6) of the light, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Rung by implementing the sides of the cavity as being sloped for the purpose of the optimizing the projection of the light the speaker.

Regarding claim 4, Rung discloses everything claimed as applied above (see claim 1). Figure 6 discloses the opening being asymmetrical.

Regarding claim 5, Rung discloses everything claimed as applied above (see claim 1). Figure 6 discloses the enclosure being cylindrical.

Regarding claim 6, Rung discloses everything claimed as applied above (see claim 5). However, Rung fails to disclose the light emitting device located at the bottom of the inside of the enclosure. Positioning a light emitting device in various locations was well known in the art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Rung by position the light emitting device at the bottom of the enclosure for the purpose of optimally projection of the light as desired.

Regarding claim 7, Rung discloses everything claimed as applied above (see claim 6). Figure 6 discloses the enclosure having an opening at the top.

Regarding claim 8, and 10 -11, Rung discloses a microphone array with high directivity. Rung discloses a housing (10), wherein the microphone has visual indication function, which is visible through an opening (12) via a light source (11), wherein with the light being positioned in a recess of the housing constitutes as a cover over the light; wherein it is obvious that the opening is only visible to a speaker when the speaker's mouth is within a sensitivity region of a

microphone in respect the position or angle of the microphone (col. 6, lines 5-27, and col. 8, lines 19-32), which reads on an enclosure, a light-emitting device, therein as claimed. However, Rung fails to disclose the sides of the cavity are sloped. With the angle projection (see figure 6) of the light, it would have been it obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Rung by implementing the sides of the cavity as being sloped for the purpose of the optimizing the projection of the light the speaker.

Regarding claims 12-13, Rung discloses a microphone array with high directivity. Rung discloses a microphone array (claim 13), a housing (10), wherein the microphone has visual indication function, which is visible through an opening (12) via a light source (11), wherein it is obvious that the opening is only visible to a speaker when the speaker's mouth is within a sensitivity region of a microphone in respect the position or angle of the microphone (col. 6, lines 5-27 and col. 8, lines 19-32), which reads on a microphone, a light-emitting device, therein as claimed. However, Rung fails to disclose a plug with an enclosure and coupling thereto a microphone. A microphone having a various types of plug with a light emitting device coupled in the plug are common features of a microphone. Thus, it would have been obvious to one of the ordinary skill in the art at time the invention was made to modify the invention of Rung by implementing a plug with a light-emitting device coupled to a microphone for the purpose of enhancing the function of the a microphone apparatus to provide comfort to the user.

Regarding claim 14, Rung discloses everything claimed as applied above (see claim 12). However, Rung fail to disclose a time delay estimation. The examiner takes official notice time delay estimation was well known. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of rung by incorporating

time delay estimation for the purpose of adequately determining the time need to effectively process a plurality of microphones, wherein the arrival time of signal to each microphone differs.

Regarding claims 15-22, Rung discloses everything claimed as applied above (see claim 12). Rung fails to disclose the plurality of applications and/or devices in which the microphone for input, as claimed. The examiner takes official notice that such microphone applications were well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and Mills by incorporating such various microphone applications and/or multimedia type devices with microphones for the purpose implementing various and diverse convenient ways of using the microphone for communication purposes.

Allowable Subject Matter

4. Claims 23-25 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1-2, and 4-22 have been considered but are moot in view of the new ground(s) of rejection.


The applicant did not provide any argument against the art rejection. The applicant provided remarks regarding previously objected to subject matter. However, upon further search and consideration, an art rejection of claims 1-2, and 4-22 is provided in respect to the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura A. Grier
Primary Examiner
Art Unit 2615
April 13, 2006

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